

WHAT IS CLAIMED IS:

1. A polymer composition comprising a polymer having a glass transition temperature of 120°C to 400°C as a simple substance of the polymer and an organic modified layered silicate having a decomposition starting temperature of 190°C to 350°C wherein the organic modified layered silicate is contained in the polymer.
2. The polymer composition according to claim 1, wherein the polymer has a glass transition temperature of 160°C to 300°C.
3. The polymer composition according to claim 1, wherein the polymer has a glass transition temperature of 180°C to 250°C.
4. The polymer composition according to claim 1, wherein the polymer is selected from the group consisting of polycarbonates, cycloolefin polymers, polyalylates, polyether sulphones and olefin metathesis polymers.
5. The polymer composition according to claim 1, wherein the polymer is an olefin metathesis polymer.
6. The polymer composition according to claim 5, wherein the olefin metathesis polymer is prepared by olefin metathesis reaction of a norbornene type monomer.
7. The polymer composition according to claim 5, wherein the olefin metathesis polymer is prepared by olefin metathesis reaction of a monocyclic cycloolefin type monomer.
8. The polymer composition according to claim 1, wherein the organic modified layered silicate has a decomposition starting temperature of 250°C to 350°C.
9. The polymer composition according to claim 1, wherein the organic modified layered silicate has a decomposition starting temperature of 250°C to 300°C.
10. The polymer composition according to claim 1, wherein the organic modified layered silicate contains a

compound selected from the group consisting of tetraalkylphosphonium compounds, triphenylphosphonium compounds, tetraphenylphosphonium compounds, quaternary salts of nitrogen-containing or heterocyclic compounds.

5        11. The polymer composition according to claim 1, wherein the organic modified layered silicate contains a tetraphenylphosphonium compound.

12. The polymer composition according to claim 1, wherein the organic modified layered silicate contains a  
10        quaternary salt of nitrogen-containing or heterocyclic compound.

13. A film consisting of the polymer composition according to claim 1.

14. A gas barrier film comprising the film consisting  
15        of the polymer composition according to claim 1 and an organic/inorganic hybrid layer wherein the organic/inorganic hybrid layer is formed on the film by the sol-gel method.

15. The gas barrier film according to claim 14, which further has a film comprising a polymer on the  
20        organic/inorganic hybrid layer.

16. The gas barrier film according to claim 15, wherein the film comprising a polymer consists of the polymer composition according to claim 1.

17. The gas barrier film according to claim 15, which  
25        shows a gaseous oxygen transmission rate of  $10 \text{ ml/m}^2 \cdot \text{day} \cdot \text{atm}$  or less at  $23^\circ\text{C}$ , 90% RH.

18. A substrate comprising the film according to claim 13.

19. An image display device comprising the film  
30        according to claim 13.

20. The image display device wherein the device is an organic EL device.